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Amendments to the Claims

1. (Canceled)
2. (Canceled)
3. (Canceled)
4. (Canceled)
5. (Canceled)
6. (Canceled)
7. (Canceled)
8. (Canceled)
9. (Canceled)
10. (Canceled)
11. (Canceled)
12. (Canceled)
13. (Currently amended) A method for cleaning a surface within an industrial equipment vessel, the vessel having a wall with an aperture therein, the method comprising:
for a plurality of cycles:
introducing fuel and oxidizer to a conduit positioned to discharge combustion products of the fuel and oxidizer into the vessel through the aperture; and

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initiating a reaction of the fuel and oxidizer so as to cause a shockwave to impinge upon the surface to ~~at least loosen~~ remove said material ~~on~~ from the surface; and at least between said cycles introducing a pressurized gas to the conduit effective to ~~substantially~~ resist upstream infiltration within the conduit of a contaminant from an interior of the vessel.

14. (Original) The method of claim 13 wherein:
the reaction of the fuel/oxidizer mixture comprises a deflagration-to-detonation transition.
15. (Currently amended) The method of claim 13 wherein:
the pressurized gas comprises ~~in major portion~~ air.
16. (Currently amended) The method of claim 13 wherein:
the pressurized gas is introduced through a gas port in a downstreammost 20% of a flowpath length within the conduit.
17. (Currently amended) The method of claim 13 wherein:
the pressurized gas lacks said fuel.
18. (Currently amended) The method of claim 13 wherein:
the pressurized gas is different from said oxidizer.
19. (Currently amended) The method of claim 13 wherein:
the pressurized gas is introduced at a plurality of circumferential locations to form a curtain of gas.
20. (Currently amended) The method of claim 13 wherein:
the pressurized gas is introduced continuously.
21. (Currently amended) The method of claim 13 wherein:

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the pressurized gas is introduced with a radially inward velocity component and a longitudinally downstream velocity component.

22. (Currently amended) The method of claim 21 wherein:
the pressurized gas is introduced with a tangential velocity component.
23. (Currently amended) The method of claim 13 wherein:
the pressurized gas is supplemental to a purge flow introduced separately.